

Rec'd PCT/PTO 23 DEC 2004

COPY FOR IB

PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

10/519511

REC'D 05 NOV 2004

WIPO

PCT

Applicant's or agent's file reference 3FPO-04-17	<b>FOR FURTHER ACTION</b> See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)	
International application No. <b>PCT/KR2003/001041</b>	International filing date (day/month/year) <b>28 MAY 2003 (28.05.2003)</b>	Priority date (day/month/year) 27 JUNE 2002 (27.06.2002)
International Patent Classification (IPC) or national classification and IPC  <b>IPC7 C12Q 1/02</b>		
Applicant  <b>KOREA RESEARCH INSTITUTE OF BIOSCIENCE AND BIOTECHNOLOGY et al</b>		



- This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.
- This REPORT consists of a total of 4 sheets, including this cover sheet.  
☐ This report is also accompanied by ANNEXES, i.e., sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).  
 These annexes consist of a total of \_\_\_\_\_ sheets.

- This report contains indications relating to the following items:
  - I ☒ Basis of the report
  - II ☐ Priority
  - III ☐ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
  - IV ☐ Lack of unity of invention
  - V ☒ Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
  - VI ☐ Certain documents cited
  - VII ☐ Certain defects in the international application
  - VIII ☒ Certain observations on the international application

EPO - DG 1

10. 12. 2004

(52)

Date of submission of the demand  <b>13 JANUARY 2004 (13.01.2004)</b>	Date of completion of this report  26 OCTOBER 2004 (26.10.2004)
Name and mailing address of the IPEA/KR  Korean Intellectual Property Office 920 Dunsan-dong, Seo-gu, Daejeon 302-701, Republic of Korea Facsimile No. 82-42-472-7140	Authorized officer  BAIK, Kyong UP  Telephone No. 82-42-481-5596 

Form PCT/IPEA/409 (cover sheet) (July 1998)

## INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/KR2003/001041

## 1. Basis of the report

## 1. With regard to the elements of the international application:\*

- ☒ the international application as originally filed
- ☐ the description:  
pages \_\_\_\_\_, as originally filed  
pages \_\_\_\_\_, filed with the demand  
pages \_\_\_\_\_, filed with the letter of \_\_\_\_\_
- ☐ the claims:  
pages \_\_\_\_\_, as originally filed  
pages \_\_\_\_\_, as amended (together with any statement) under Article 19  
pages \_\_\_\_\_, filed with the demand  
pages \_\_\_\_\_, filed with the letter of \_\_\_\_\_
- ☐ the drawings:  
pages \_\_\_\_\_, as originally filed  
pages \_\_\_\_\_, filed with the demand  
pages \_\_\_\_\_, filed with the letter of \_\_\_\_\_
- ☐ the sequence listing part of the description:  
pages \_\_\_\_\_, as originally filed  
pages \_\_\_\_\_, filed with the demand  
pages \_\_\_\_\_, filed with the letter of \_\_\_\_\_

## 2. With regard to the language, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language English which is

- ☐ the language of a translation furnished for the purposes of international search (under Rule 23.1(b)).
- ☒ the language of publication of the international application (under Rule 48.3(b)).
- ☐ the language of the translation furnished for the purposes of international preliminary examination (under Rules 55.2 and/or 55.3).

## 3. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.
- ☐ filed together with the international application in computer readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. ☐ The amendments have resulted in the cancellation of:

- ☐ the description, pages \_\_\_\_\_
- ☐ the claims, Nos. \_\_\_\_\_
- ☐ the drawings, sheet \_\_\_\_\_

## 5.

- ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).\*\*

\* Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this opinion as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17).

\*\* Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.

INTERNATIONAL PRELIMINARY EXAMINATION

International application No.  
PCT/KR2003/001041

V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Claims	1-7	YES
	Claims	NONE	NO
Inventive step (IS)	Claims	1-7	YES
	Claims	NONE	NO
Industrial applicability (IA)	Claims	1-7	YES
	Claims	NONE	NO

2. Citations and explanations (Rule 70.7)

Claims 1-7 of the present invention relate to a method for high throughput of plant growth regulators comprising the steps of culturing photomixotrophic cells to which candidates for plant growth regulators are added; and measuring cell growth on a large cells at the same time.

1. Novelty

The present invention according to claims 1-7 relating to a method for high throughput of plant growth regulators comprising the steps of culturing photomixotrophic cells to which candidates for plant growth regulators are added; and measuring cell growth on a large cells at the same time, is considered to be novel compared with the prior art which is cited in the international search report(PCT Article 33(2)).

2. Inventive Step

The present invention according to claims 1-7 relating to a method for high throughput of plant growth regulators comprising the steps of culturing photomixotrophic cells to which candidates for plant growth regulators are added; and measuring cell growth on a large cells at the same time, is not easy for a person skilled in the art to arrive at from the prior art which is cited in the international search report. Therefore, it is considered to involve an inventive step((PCT Article 33(3)).

3. Industrial Applicability

Claims 1-7 of the present invention are considered to be industrially applicable(PCT Article 33(4)).

**INTERNATIONAL PRELIMINARY EXAMINATION REPORT**

International application No.

PCT/KR2003/001041

**VIII. Certain observations on the international application**

The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made:

The expression in the claims 1-7 "photomixotrophic cell" is not clear regarding the items wherein the invention is protected using an extensive expression which is not specified concisely and is not supported by a description(PCT Article 6).